

Serial No. 10/622,619  
Attorney Docket No. 070456-40015C1  
Amendment

AMENDMENTS TO THE CLAIMS:

This listing of the pending claims will replace all prior versions and listings of claims in this application:

1. (Currently Amended) A coated paper comprising:

a paper substrate; and

a coating applied to at least one side of said paper substrate at a coat weight of about 2 pounds per 3,300 square feet to about 8 pounds per 3,300 square feet, ~~to at least one side of said paper~~ wherein said coating comprises a stable aqueous cationic slurry of an alumina pigment, a wetting agent or nonionic polymer, and a cationic interfacial modifier, dispersant without using any acidic dispersants, wherein said alumina pigment is ~~from present at~~ about 35% by weight to about 45% by weight of the said cationic slurry, and the nonionic said wetting agent or nonionic polymer of combination thereof is present at about 0.5% by weight to about 5% by weight of said cationic slurry, and said cationic interfacial modifier is ~~from present at~~ about 2% by weight to about 15% by weight of said cationic slurry, and wherein the remaining % by weight of said cationic slurry is selected from the group consisting of cationic dispersants, cationic surfactants, water and combinations thereof, and water; wherein said cationic pigment slurry is mixed with binders, pigments, and other additives to form a coating formulation with has a total solids content ~~from~~ of about 42% by weight of the coating formulation up to about 72% by weight of the coating formulation.

2. (Currently Amended) The coating coated paper of claim 1 wherein the nonionic said wetting agent is selected from the group consisting of monohydric alcohols, polyhydric alcohols, polyalcohols, and polyols, an fattylenic alcohol and combinations thereof.

3. (Currently Amended) The coating coated paper claim 1 wherein the said nonionic polymer is a nonionic polyacrylamide or a nonionic polyvinyl alcohol.

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4. (Currently Amended) The coating coated paper of claim 1 wherein the said cationic interfacial modifier is selected from the group consisting of cationic dispersants, cationic surfactants and combinations thereof.
5. (Currently Amended) The coating coated paper of claim 1 wherein the said cationic interfacial modifier comprises includes at least one of an aluminum hydroxychloride, a quaternary ammonium, and an inorganic oligomer or combinations thereof.
6. (Currently Amended) The coating coated paper of claim 1 wherein the aqueous cationic slurry said coating has a viscosity of less than about 5000 cPs, Brookfield No. 4 spindle, 20 rpm.
7. (Currently Amended) The coated paper of claim 1 wherein a base coating is applied to the said paper substrate before the said coating formulation is applied.
8. (Currently Amended) The coated paper of claim 1 wherein the said coating formulation has a mechanically treated surface.
9. (Currently Amended) A method of making a coated paper comprising:
  - providing a paper substrate; and
  - providing a coating wherein said coating comprises preparing a stable aqueous cationic slurry of including an alumina pigment, a wetting agent or nonionic polymer, and a cationic interfacial modifier, dispersant without using any acidic dispersants, wherein said alumina pigment is from present at about 35% by weight to about 45% by weight of the said cationic slurry, and the nonionic said wetting agent or nonionic polymer of combination thereof is present at about 0.5% by weight to about 5% by weight of said cationic slurry, and said cationic interfacial modifier is from present at about 2% by weight to about 15% by weight of said

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cationic slurry, and wherein the remaining % by weight of said cationic slurry is selected from the group consisting of cationic dispersants, cationic surfactants, water and combinations thereof, ~~and water; wherein said cationic pigment slurry is mixed with binders, pigments, and other additives to form a coating formulation with has a total solids content from of about 42% by weight of the coating formulation up to about 72% by weight of the coating formulation; and~~

~~applying said coating cationic slurry to at least one side of said paper substrate at a coat weight of about 2 pounds per 3,300 square feet to about 8 pounds per 3,300 square feet to at least one side of said paper.~~

10. (Currently Amended) The method of claim ~~10~~ 9 wherein said coating is applied by a method selected from the group consisting of roll, blade, bar, pad coater, or cast coating.

11. (Currently Amended) The method of claim ~~10~~ 9 wherein excess coating is metered off to form a uniform coating thickness.

12. (Currently Amended) The method of claim ~~10~~ 9 wherein said coating is dried by heat treatment.

13. (New) A method of making a coated paper comprising:

providing a paper substrate;

preparing a slurry including an alumina pigment, a wetting agent and a cationic interfacial modifier, wherein said alumina pigment is present at about 35 to about 45 percent by weight of said slurry, said wetting agent is present at about 0.5 to about 5 percent by weight of said slurry and said cationic interfacial modifier is present at about 2 to about 15 percent by weight of said slurry, wherein said cationic slurry has a total solids content of about 42 to about 72 percent by weight; and

applying said slurry to at least one side of said paper substrate at a coat weight of about 2

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to about 8 pounds per 3,300 square feet.

14. (New) The method of claim 13 wherein said wetting agent is selected from the group consisting of monohydric alcohols, polyhydric alcohols, polyalcohols, polyols, facetylenic alcohol and combinations thereof.

15. (New) The method of claim 13 wherein said cationic interfacial modifier includes at least one of a cationic dispersants and a cationic surfactants.

16. (New) The method of claim 13 wherein said cationic interfacial modifier includes at least one of an aluminum hydroxychloride, a quaternary ammonium and an inorganic oligomer.